

ENABLING
SEVEN DAY
SERVICES

STANDARD 5

ACCESS TO
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SEVEN DAY SERVICES CASE STUDY

APRIL 2016

James Paget University Hospitals NHS Foundation Trust

Utilising point-of-care testing and evidence-based service redesign to establish a ambulatory emergency care service

AT A GLANCE:

- There is increasing evidence that ambulatory emergency care (AEC) services have significant impact on reducing inpatient admissions, improve patient management and the overall patient experience.
- James Paget University Hospital ran a successful pilot for three months in August 2014 to establish AEC services utilising national best practice guidelines including senior decision makers at the first point of clinical contact, condition-specific diagnostic algorithms and point of care testing (POCT).
- The pilot operated from Monday to Friday (08:00 – 18:30) with a team of staff consisting of a senior clinician (specialist registrar and above), nurse practitioner, and clinical support assistant. The pilot has led to the commissioning of a seven day service.

The James Paget Hospital (JPUH) is a local district general hospital with a patient catchment of 240,000. The limited AEC service previously in place was not capable of meeting demand and presented an opportunity for a fundamental re-design of the patient management streams and formation of the new Ambulatory Care Unit (AmbU). The AEC ethos of identifying and managing patients with acute medical conditions without the need for overnight admission, is the key to reducing the inpatient burden whilst improving patient management and experience^{1,2}.

How the improvements were made

The redesign of the service was supported by a quality improvement agency, and was based on the current state of the system and then identifying an ideal future state.

AEC aims to treat patients whose acute condition should not require an overnight admission. To identify the patients who would benefit most from the service the JPUH team looked at best practice guidelines and local data and determined a suitable

¹Royal College of Physicians. Acute care toolkit 10; Ambulatory emergency care. Royal College of Physicians (2014)

²Ambulatory Emergency Care Network. Ambulatory Emergency Care: a solution to manage emergency demand, improve outcomes and reduce waits. (2012)

cohort of non-injured ambulant, medical patients with conditions such as suspected pulmonary embolism, cellulitis, and low risk chest pain.

A three month pilot of new AEC pathways were used which expedited investigations, including point of care testing (POCT) in A&E, appropriate treatment/discharge planning, early senior clinical decision maker input and condition-specific management algorithms. The new AEC pathways were designed following multi-stakeholder input and based on the data. The pilot quickly demonstrated that POCT had a significant impact on hospital length of stay, (although as a standalone solution it can be hindered by restrictions in laboratory test turnaround time). Financial constraints were helped during the pilot by an industry partner who provided equipment enabling blood tests to be analysed and reviewed in the AmbU in real time to avoid the wait for centralised pathology testing.

Some barriers were encountered in implementing the changes as previous failed transformation attempts had impacted on staff morale, and enthusiasm for change. A staff salience analysis was completed; staff were surveyed to establish the reasons for their concerns and to understand what measures would need to be implemented to obtain their support and overcome any resistance. The improvements had senior clinical ownership and strong executive leadership, which along with well executed communication plans supported staff to implement the changes.

What was achieved

- 26.06% of the daily available acute medicine take was seen through AmbU during the pilot. Since the pilot ended this has increased to 30-50%.
- Patients who come to A&E have rapid access to ambulatory care. Time to initial review has reduced from 14 to 4 minutes. Patients are seen by a senior clinical decision maker for a review in less than an hour.
- Patient involvement in their decision-making has increased, and their wait for diagnostic tests, diagnosis and treatment decisions are shorter, helping with an efficient and effective progression through the system.
- 79% of patients are 'extremely likely' to recommend the service, and 21% 'likely' (based on those surveyed in the friends and family test).
- The pilot evidenced a viable operational and financial model which enabled the unit to establish seven day AEC services with increased operational hours (08:00 - 21:30). This will commence service in 2015 following the recruitment of additional consultants and nurse practitioners.

What was the impact

The results of the pilot evidenced:

- There was a 40.8% reduction in patient length of stay in A&E from 250 minutes to 110 minutes.
- The lowest ever Acute Medical Unit length of stay was achieved at 0.8 bed days (reduced from 1.04 days). This has 'saved' 59 overnight stays.
- There was an 8.22% increase in zero admissions (same day discharges) during the pilot, with an associated decrease of 8.93% in 1, 2 and 3 day length of stay admissions.
- There were 53 fewer cancelled elective procedures during the pilot.
- Readmission rates have remained static.
- As a direct result of AmbU 15 medical escalation beds have been removed from the trust with their subsequent availability for elective work.

These achievements were made in the context of a 7.61% increase in medical inpatient activity.

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TOP TIPS

- **Strong ongoing senior leadership and commitment is needed throughout the change.**
- **Start with a solid understanding of the current system; JPUH used process activity mapping to understand how their current system actually worked.**
- **Have a robust method of ongoing evaluation. JPUH adopted the 'failure mode and effect analysis', which enabled them to identify any risk and quantify any impact, which in turn allowed their prioritisation and management.**
- **Develop a culture of collaboration between A&E, and the rest of the hospital with a conscious breaking down of the traditional emergency floor NHS silo, and integration of AEC services into the existing emergency care set up (A&E and AMU).**
- **Build a process that is based on national guidance that will support the evidence base for the change and the cohort of patients that are most likely to benefit from the service.**